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Latest JPF News

- 11/30/2010 JPF version 6 released update your ipf-core
- 09/20/2010 ASE 2010 Tutorial on Automated Component-Based Verification Slides
- 08/02/2010 summer project presentations set for 08/13/2010 see summer summit event page
- 04/29/2010 Selected summer projects announced
- 02/14/2010 ISSTA 2010 Tutorial on Automated Testing with Java PathFinder announced
- 02/12/2010 Call for Google Summer of Code 2010 project proposals out visit our SoC page
- 01/30/2010 JPF Google group replaces old mailing lists
- 01/12/2010 Fujitsu press announcement released about using and extending Symbolic PathFinder
 - (projects/jpf-symbc) for comprehensive testing of Java web applications
- 09/02/2009 JPF server on http://babelfish.arc.nasa.gov/trac/jpf goes live, featuring the JPFWiki and separate Mercurial repositories for JPF core and extension projects
- 07/22/2009 JPF wins the 2009 "Outstanding Technology Development Award" of the Federal Laboratory Consortium (FLC), Far West Division

Welcome to the JPF Wiki

This is the main page for Java? Pathfinder, or "*JPF*" as we call it from here. JPF is a highly customizable execution environment for verification of Java? bytecode programs. The system was developed at the <u>NASA Ames Research Center</u>, open sourced in 2005, and is freely available from this server under the <u>NOSA 1.3</u> license.

The JPFWiki is our primary source of documentation. It is divided into the following sections (which you will

always see in the TOC menu to the right):

- What is JPF? -- a brief introduction into JPF and what sets it part from normal testing
 - software model checking examples (as one possible JPF application)
- How to obtain and install JPF -- everything to get it running on your machine
 - ♦ <u>System requirements</u>
 - ♦ repository access from shell, Eclipse? or NetBeans?
 - ♦ installing the **Eclipse** or **NetBeans** plugins
- How to use JPF -- essentially the user manual for JPF
 - ♦ <u>JPF application types</u> and <u>runtime components</u>
 - ♦ configuring and running JPF
 - ♦ understanding JPF output
 - using the Verify API
- Developer guide -- what's under the hood
 - ♦ the toplevel design
 - ♦ key mechanisms like <u>ChoiceGenerators</u> and <u>partial order reduction</u>
 - ◆ extension mechanisms? like <u>Listeners</u>, Search Strategies?, <u>Model Java Interface (MJI)</u>, <u>Bytecode Factories</u>, Property checks?, Publishers?
 - ♦ running JPF from within your application
 - directory structure? and coding conventions
 - ♦ writing JPF tests
- Projects -- descriptions of available JPF projects and repositories
- Related Research and publications
- About -- how are artifacts and work organized
 - ♦ About this Wiki
 - ♦ About the Development Process?
 - ♦ About the source repositories?
 - ♦ How to contribute
 - ♦ How to get a JPF contributor account
- FAO -- answers to all your questions (eventually)
- History? -- how did we get here
- Support -- who supports this project
- People? -- who does or did contribute
- News? -- what's going on right now
- Future Plans? -- where do we want to go

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